Claims

What is claimed is:

1. A method of inhibiting a respiratory syncytial virus (RSV) infection in a patient by decreasing the endogenous protein kinase C (PKC) activity within the patient.

2. The method of claim 1, wherein the PKC activity is that of at least one classical PKC isoform.

3. The method of claim 1, wherein said decreasing comprises administering at least one PKC inhibitor to the patient.

4. The method of claim 3, wherein the at least one PKC inhibitor is selected from the group consisting of AG 490, PD98059, PKC-alpha/beta pseudosubstrate peptide, staurosporine Ro-31-7549, Ro-31-8220, Ro-31-8425, Ro-32-0432, sangivamycin; calphostin C, safingol, D-erythro-sphingosine, chelerythrine chloride, melittin; dequalinium chloride, Go6976, Go6983, Go7874, polymyxin B sulfate; cardiotoxin, ellagic acid, HBDDE, 1-O-Hexadecyl-2-O-methyl-rac-glycerol, hypercin, K-252, NGIC-J, phloretin, piceatannol, tamoxifen citrate, flavopiridol, and bryostatin 1.

5. The method of claim 3, wherein the at least one PKC inhibitor is selected from the group consisting of an antisense oligonucleotide molecule, a polypeptide, and a function-blocking antibody or fragment thereof.

6. The method of claim 3, wherein said decreasing comprises administering a polynucleotide encoding the at least one PKC inhibitor to the patient, wherein the polynucleotide is expressed within the patient.

7. The method of claim 1, wherein the patient is human.

8. The method of claim 1, wherein the patient is suffering from the RSV infection, and wherein said decreasing alleviates at least one of the symptoms associated with the RSV infection.

9. The method of claim 1, wherein the patient is not suffering from the RSV infection.

10. The method of claim 3, wherein the at least one PKC inhibitor is administered to the patient orally or intranasally.

11. The method of claim 3, wherein the at least one PKC inhibitor is administered with a pharmaceutically acceptable carrier.

12. The method of claim 6, wherein the polynucleotide is administered to the patient with a pharmaceutically acceptable carrier, wherein the pharmaceutically acceptable carrier comprises chitosan or a derivative thereof.

13. The method of claim 3, wherein the at least one PKC inhibitor is co-administered with at least one additional anti-viral agent.

14. A pharmaceutical composition comprising at least one protein kinase C (PKC) inhibitor and a pharmaceutically acceptable carrier.

15. The pharmaceutical composition of claim 14, wherein said at least one PKC inhibitor is selected from the group consisting of AG 490, PD98059, PKC-alpha/beta pseudosubstrate peptide, staurosporine Ro-31-7549, Ro-31-8220, Ro-31-8425, Ro-32-0432, sangivamycin; calphostin C, safingol, D-erythro-sphingosine, chelerythrine chloride, melittin; dequalinium chloride, Go6976, Go6983, Go7874, polymyxin B sulfate; cardiotoxin, ellagic acid, HBDDE, 1-

O-Hexadecyl-2-O-methyl-rac-glycerol, hypercin, K-252, NGIC-J, phloretin, piceatannol, tamoxifen citrate, flavopiridol, and bryostatin 1.

16. The pharmaceutical composition of claim 14, wherein said at least one PKC inhibitor is selected from the group consisting of an anti-sense oligonucleotide molecule, a polypeptide, and a function-blocking antibody or fragment thereof.

17. The pharmaceutical composition of claim 14, wherein said composition comprises a polynucleotide encoding said at least one PKC inhibitor.

18. The pharmaceutical composition of claim 17, wherein said pharmaceutically acceptable carrier comprises chitosan.

19. The pharmaceutical composition of claim 14, wherein said composition further comprises at least one additional anti-viral agent.

20. A host cell that has been genetically modified with a nucleotide sequence encoding at least one PKC inhibitor, wherein said nucleotide sequence is expressed in said cell.